NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NOTICE GRC-06-01

National Environmental Policy Act; Demolition of the Altitude Wind Tunnel (AWT) Complex and Propulsion Systems Laboratory (PSL) (Test Cells 1 & 2) at the National Aeronautics and Space Administration (NASA) Glenn Research Center (GRC)

AGENCY: NASA Glenn Research Center (GRC)

ACTION: Finding of no significant impact

SUMMARY: Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321, *et seq.*), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the NEPA (40 CFR parts 1500–1508), and NASA's NEPA policy and procedures (14 CFR subpart 1216.3), NASA has made a Finding of No Significant Impact (FONSI) with respect to the proposed demolition of the AWT Complex and the PSL (Test Cells 1 & 2). The demolition is needed because of increasingly escalating maintenance costs and lack of need for these outdated and obsolete facilities. Small or no impacts were determined for land use, air quality, water quality, noise, geology and soils, natural resources (including threatened and endangered species), socioeconomics, hazardous materials handling and waste disposal, transportation, Environmental Justice, and cumulative effects. The principal area of potential environmental impact addressed in this Environmental Assessment (EA) involves the historic nature of the AWT Complex and PSL (Test Cells 1 & 2). Both facilities are considered unique historic properties, and their value is recognized as contributing elements to the proposed historic district that may be eligible in the National Register of Historic Places (NRHP). While the proposed demolition would adversely impact GRC's cultural resources and result in a loss of the facilities, the history of the structures would be retained through mitigation measures developed in consultation with the Ohio Historic Preservation Office (see Chapter 5 of the EA for representative mitigation measures for cultural resources).

After careful evaluation of the EA and consideration of all the comments, NASA has determined that, subject to the implementation of the mitigation measures, the demolition of the AWT Complex and PSL (Test Cells 1 & 2) at GRC will not significantly affect the quality of the human environment. Therefore, preparation of an environmental impact statement is not required.

DATE: February 12, 2007

ADDRESS: NASA Glenn Research Center, Environmental Management Branch, Mail Stop 6-4, 21000 Brookpark Road, Cleveland, OH 44135.

FOR FURTHER INFORMATION CONTACT: The Final EA may be obtained by contacting Ms. Trudy Kortes at the address listed above or by e-mail at trudy.f.kortes@nasa.gov.

SUPPLEMENTAL INFORMATION: NASA initiated a 30-day public review and comment period, from December 10, 2006, through January 12, 2007, for the EA for the Demolition of the AWT Complex and PSL (Test Cells 1 & 2) at NASA GRC. NASA has reviewed the Final EA and has determined that it represents an accurate and adequate analysis of the scope and level of associated environmental impacts. The final EA is incorporated by reference in this FONSI.

The NASA plans to demolish the AWT Complex and PSL (Test Cells 1 & 2). In general, the GRC has no further need for the AWT Complex and PSL (Test Cells 1 & 2). Both facilities are outdated and well beyond their expected and useful lives. In addition, the facilities are deteriorating and require significant maintenance. Demolishing the AWT and PSL buildings would be expected to reduce GRC's future maintenance costs for these facilities and provide real estate for future use. Under the No-Action Alternative, the AWT Complex and PSL (Test Cells 1 & 2) would not be demolished. The No-Action Alternative would result in indefinite maintenance with increasing costs for the AWT Complex and PSL (Test Cells 1 & 2) and would restrict real estate for future use.

The EA addresses the potential historic and environmental impacts associated with the Proposed Action and the No-Action Alternative. Small or no impacts were determined for land use, air quality, water quality, noise, geology and soils, natural resources (including threatened and endangered species), socioeconomics, hazardous materials handling and waste disposal, transportation, Environmental Justice, and cumulative effects.

While the proposed demolition would impact the NASA GRC's cultural resources and result in a loss of the facilities, the history of the structures would be retained through mitigation measures developed in consultation with the Ohio Historic Preservation Office (see Chapter 5 of the EA for representative mitigation measures for cultural resources). If necessary, additional mitigation measures would be developed to preserve the history of the facilities and mitigate the effects of demolition upon the proposed historic district in consultation with the GRC Federal Preservation Officer and the Ohio Historic Preservation Officer. The status (eligibility and final NRHP listing) of the facilities and the historic district has not been officially determined by the Ohio Historic Preservation Office. However, early discussions between the Ohio Historic Preservation Office and the GRC Historic Preservation Officer indicate that the facilities are eligible for listing in the NRHP. An agreement document such as a Memorandum of Agreement would be developed between NASA GRC and the Ohio Historic Preservation Office that would specify the mitigation measures required before the Proposed Action goes forward.

Historic Mitigation Measures and Documentation for Attitude Wind Tunnel (AWT)

The NASA is planning the following Historic Mitigation and Documentation for the AWT:

1) The NASA GRC will prepare and archive Level II Historic American Engineering Record (HAER) documents of the AWT complex. These documents will summarize the construction, historical context, technological significance, and a physical description of the AWT. Included in this documentation will be selected photographs and architectural drawings from NASA's files.

2) The NASA GRC will collect, appraise, and maintain a collection of historically significant documents that will become a permanent record of the AWT. These documents may include correspondence, architectural drawings, maps, scientific or engineering publications, and related materials.

3) The NASA GRC will update the photographic images of the AWT by digitizing unscanned negatives and photographs and uploading them to the GRC Imagenet database. The NASA will perform several 360 degree images of the AWT before demolition begins. The NASA will compile film and video of tests performed in the AWT and have the film/video digitized. From the above digitized files, NASA will produce a CD-ROM or DVD that will include photographs, panoramic photographs, video clips, and scanned documents. This disc may supplement the monograph or be distributed separately.

4) The NASA GRC will conduct oral interviews with NASA retirees, facility and program managers, and others. These interviews will be recorded and transcribed. Selected interviews will be videotaped. The NASA will produce a documentary video that would describe the facility, its history, and research programs. The documentary may include some of these interviews.

5) The NASA GRC will publish a monograph recording the history of the AWT. The monograph will include photographs to illustrate the narrative text.

6) The NASA GRC will produce museum quality display boards that show the history of the AWT and the technology that was developed from the testing performed there. The NASA GRC will showcase this display material at an appropriate campus tour stop or at the Visitor's Center, in order to make the interpretive material available to the public.

7) The NASA GRC will create a Web site with public access for the AWT through the NASA GRC History Office Web site. Historic photographs of the construction and testing within the Test Section, the tunnel, and the Space Power Chamber will be available for viewing. Photographs of the current state of the AWT and photographs documenting the demolition of the AWT will also be available for viewing. The text from the monograph will also be available for viewing.

Historic Mitigation Measures and Documentation for PSL (Test Cells 1 & 2)

The NASA is planning the following Historic Mitigation and Documentation for PSL (Test Cells 1 & 2):

1) The NASA is investigating the feasibility of retaining one test chamber and setting it up as an interpretive educational site and tour stop. If this is feasible, NASA will produce museum quality display boards that show the history of PSL (Test Cells 1 & 2) and the technology that was developed from the testing performed there.

2) A monograph will be published recording the history of the PSL (Test Cells 1 & 2). The monograph will include full-sized photographs.

3) A Web site with public access will be developed for PSL (Test Cells 1 & 2). Historic photographs of the construction and testing within the test chamber will be available for viewing. Photographs of the current state of PSL (Test Cells 1 & 2) and photographs documenting the demolition of PSL (Test Cells 1 & 2) will also be available for viewing. The text from the monograph will also be available for viewing.

4) Historic American Building Survey and HAER documents of the PSL (Test Cells 1 & 2) complex will be prepared and archived. These documents will summarize the construction, historical context, technological significance, and a physical description of the facility. Included in this documentation will be selected photographs and architectural drawings from NASA's files.

5) The NASA will collect, appraise, and maintain a collection of historically significant documents that will become a permanent record of PSL (Test Cells 1 & 2). These documents may include correspondence, architectural drawings, maps, scientific or engineering publications, and related materials.

6) The NASA will update the photographic images by digitizing unscanned negatives and photographs and uploading them to the GRC Imagenet database. The NASA will perform several 360 degree images of PSL (Test Cells 1 & 2) before demolition begins. The NASA will compile film and video of tests performed in the test chambers and have the film/video digitized. From the above digitized files, NASA will produce a CD-ROM or DVD that will include photographs, panoramic photographs, video clips, and scanned documents. This disc could supplement the monograph or be distributed separately.

7) Oral interviews will be conducted with NASA retirees, facility and program managers, and others. These interviews will be recorded and transcribed. Selected interviews will be videotaped.

8) The NASA will produce a documentary video that would describe the facility, its history, and research programs. The documentary may include oral interviews.

On the basis of the final EA, NASA has determined that the environmental impacts associated with the Proposed Action and the specified activities identified as within the scope of the final EA would not individually or cumulatively have a significant impact on the quality of the human environment.

The final EA may be obtained by contacting Ms. Trudy Kortes at NASA Glenn Research Center, Environmental Management Branch, Mail Stop 6-4, 21000 Brookpark Road, Cleveland, OH 44135 or by e-mail at trudy.f.kortes@nasa.gov.

Woodrow Whitlow, Jr.
Director

15 February 2007
Date